

UNITED STATES DEPARTMENT OF AGRICULTURE  
AGRICULTURAL ADJUSTMENT ADMINISTRATION  
SOUTHERN DIVISION

1939 A. A. A. FARM PROGRAM

RANGE CONSERVATION

**THE A. A. A. RANGE CONSERVATION PROGRAM FOR 1939****For Improvement and Conservation of Texas and Oklahoma Range Lands**

The chief aim of the 1939 Range Conservation Program is conservation of soil on range land.

Need for conserving the range in Texas and Oklahoma arises from the fact that the original grazing capacity has been gradually cut down



FIGURE 1.—Range conservation by contour ridging, furrowing, and storage of water.

by droughts, overgrazing, rodents, and noxious plants. Gradual depletion of grass not only has meant a serious loss of forage to stockmen, but also has left the fertile topsoil of large areas of range land exposed to erosion.

The Range Conservation Program is designed to help ranchers put into operation the range-building practices which experiment and actual use have shown to be of value in helping maintain or restore a good stand of grass on depleted range land. These practices seek to do this by preventing erosion or, in the more arid regions, by the conservation of water, and by eliminating range-destroying plants.

## HOW TO PARTICIPATE

Ranchmen who wish to participate in the range program will first sign the application for determination of grazing capacity, and then confer and reach an agreement with the range inspector, county agent, or county committee as to the approved practices to be carried out on the ranch, filling out the Report of Examination of Range land. In the event construction of dams is approved as a practice on the ranch, the range inspector or a duly appointed representative of the A. A. A. State committee, or county committee will visit the site, and lay out the proposed dam, establishing benchmarks and reference points. This is necessary in order that accurate measurements of the dam may be made when the work is completed. All practices will be carefully checked by the range inspector or a representative appointed by the county committee to see that they are carried out according to specifications.

## PAYMENTS TO RANCH OPERATORS

Since ranch operators who carry out range-building practices on their individual ranches are cooperating in the solution of a National problem, the Range Conservation Program provides that they will receive payments from funds to be made available for this purpose by the Federal Government. These payments and the rates at which they will be made are contingent upon the appropriation by Congress of necessary funds.

For the purposes of carrying out the provisions of the Range Conservation Program, a ranch or ranching unit includes all range land (except land owned by the United States Government) which is controlled by one operator as a separate unit in the production of livestock, and which is operated with machinery, workstock, and labor substantially separate from that used on any other range land. A ranch is regarded as located in the county in which its principal dwelling is situated. A ranch on which there is no dwelling is regarded as located in the county in which the greater portion of the land is situated.

The maximum amount of money that can be earned under the Range Conservation Program for carrying out range-building practices on any ranch is called the range-building allowance. This allowance is calculated at the rate of \$1 for each animal unit of the grazing capacity established for the ranch, plus 2 cents for each acre of range land in the ranch.

It is provided, however, that there must be a minimum of 10 acres of range land for each animal unit of the grazing capacity for which payment is made, and that the 2-cent rate on the acreage of range land cannot apply to more than 60 acres per animal unit. An animal unit is one cow, one horse, five goats, or five sheep, or an equivalent. The grazing capacity of a ranch is the number of animal units which the range land on the ranch will sustain on a 12-months' basis over a period of years without decreasing the stand of grazing vegetation and without injury to the forage, tree growth, or water-shed.

## EXAMPLES

For illustration, assume that a ranch with 16,000 acres of range land has an established grazing capacity of 400 animal units, or 40



acres per animal unit. The range-building allowance would be calculated as follows:

16,000 (acres) × 2 cents-----	\$320
400 (animal units) × \$1-----	400
Range-building allowance-----	720

In another case, assume that a ranch with 16,000 acres of range land has an established grazing capacity of 200 animal units. This would give the ranch more than the maximum of 60 acres per animal unit on which the payment of 2 cents per acre is allowed; therefore, the 2-cent payment would be made on only 60 acres per animal unit, or 12,000 acres (grazing capacity multiplied by 60). The range-building allowance in this case would be:

12,000 (acres) × 2 cents-----	\$240
200 (animal units) × \$1-----	200
Range-building allowance-----	440

In the case of a ranch with 1,000 acres of range land, assume that the established grazing capacity is 100 animal units. This would give the ranch the minimum requirement of 10 acres per animal unit for that part of the range-building allowance calculated on the basis of grazing capacity. The range-building allowance would be:

1,000 (acres) × 2 cents-----	\$20
100 (animal units) × \$1-----	100
Range-building allowance-----	120

In any case, the range-building allowance or any part of it must be earned by the ranch operator by carrying out approved range-building practices. The rates of payment allowed for the approved practices are shown in the schedule given later in this leaflet.

### HOW GRAZING CAPACITY IS DETERMINED

The grazing capacity of any ranch participating in the program in 1939 for the first time will be determined through a field survey by a county range inspector selected by the county committee, with approval of the State committee. In establishing the grazing capacity of a ranch the range inspector will take into consideration the composition, palatability, and density of forage growth; variations in weather conditions; distribution and character of watering facilities; topography; presence or absence of rodents and poisonous plants; and the number and classes of livestock previously carried.

On ranches where a grazing capacity was established in 1938, detailed inspection will not be required in 1939 except where it has been requested by the ranch operator or is deemed necessary by the county committee, State committee, or Director of the Southern Division. The grazing capacity of a ranch shall be established on the normal and not a temporary basis. The State committee, prior to March 1, 1939, will make recommendation to the Agricultural Adjustment Administration as to the grazing capacity limits for all counties of the State.

## RANGE-BUILDING PRACTICES

Grass offers the best protection to range soil. Land covered by a sufficient stand of grass almost always shows constant improvement. Rarely is it severely affected by erosion. Consequently, the Range Conservation Program provides practices which will help maintain or restore a good stand of grass. The effectiveness of these practices has been demonstrated experimentally and in actual use in eliminating competition of range-destroying plants, in preventing erosion, and in conserving water in more arid regions.

**Natural reseeding by deferred grazing.**—One of the most important practices is that of natural reseeding. This is accomplished by keeping all livestock off the pasture from the start of the growth of grass in the spring until the seed has matured.

A different portion of the ranch should be selected each year for natural reseeding by deferred grazing, so that the entire ranch eventu-

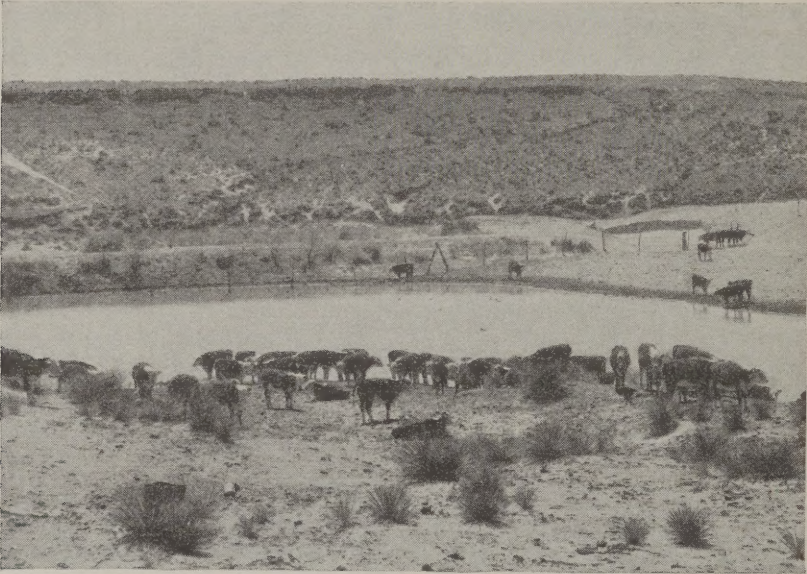


FIGURE 2.—Storage of water by earthen dams is an important phase of range conservation.

ally may be reseeded. The operator cannot qualify for payment on land that normally would not be grazed during this period, nor will he be eligible for payment if he permits any part of his ranch to be injuriously overgrazed.

Before beginning the practice of deferred grazing, the area on which grazing is to be deferred must be designated in writing by the operator and approved by the county committee. The payment for this practice will be limited to 40 percent of the range-building allowance unless the State committee has approved additional recommended practices and other conservation measures to be carried out in the county in connection with deferred grazing.

**Development of stock water on range land.**—The better distribution of watering places will lessen erosion brought about through trampling and destruction of grass by stock going long distances to water.



Stock traveling long distances to water create trails that develop into washes and gullies, causing increased damage from erosion and run-off.

**Tanks and reservoirs.**—The construction of earthen tanks and reservoirs is the most desirable method of impounding stock water under this program. Dam sites should be chosen carefully and ranchmen will confer with the county agent, range inspector, or county committee before construction is begun. After a dam site is definitely decided upon, it is required that a profile be made and platted and benchmarks and reference points be established.

**Concrete or rubble-masonry dams.**—Provision for the construction of concrete or rubble-masonry dams has been made for situations



FIGURE 3.—Contour furrowing on range-land conserves soil and water.

where earthen dams are not practicable. The same preliminary survey is required as in the case of tanks and reservoirs.

**Development of natural watering places.**—Development of natural watering places consists of improvement and development of springs and seeps by excavation. To qualify for payment, the operator must, at his own expense, wall up the spring or seep with concrete or rubble masonry walls and fence and protect it from trampling, and the water must be conveyed into a tank through a trough or through a pipe not less than 1 inch in diameter.

**Erosion and run-off control.**—Contour listing, furrowing, chiseling, contour ridging, and the building of spreader dams and terraces are erosion-control practices specified in the program. These structures hold water on the land where it falls, catch grass seed which otherwise would be lost, and help prevent erosion and keep the water out of creeks and gullies.

**Elimination of destructive plants.**—Soil may be conserved through encouraging an increased growth of grass by eliminating range-destroying plants which shade out grass or kill it by root competition.

## ADDITIONAL REQUIREMENTS BY COUNTY COMMITTEE

The county committee will submit to the State committee such additional requirements as in its judgment are needed in the interest of range conservation in that particular county, to apply to that portion of the ranch designated for deferred grazing. The additional requirements may be the eradication of prairie dogs, mowing of weeds, eradication of loco, or any other poisonous or range-destroying plants that the county committee determined will tend to lessen erosion. When the additional requirements are complied with, the deferred grazing payment will be increased to 60 percent of the range-building allowance. The recommendations for additional requirements must be made prior to the date set for the beginning of the deferred grazing period.

## PRACTICES AND CONDITIONS OF PAYMENT

Following is a complete list of practices and the rates and conditions of payments. Payment will be made for carrying out these practices, but the total payment will not be more than the range-building allowance. Additional specifications may be issued by the State committee as indicated, with the approval of the Director of the Southern Division. Payment will be made only for practices carried out between January 1, 1939, and December 31, 1939, inclusive (except that trees must be planted prior to November 1), and approved in writing in advance by the county committee.

Practices and conditions of payment	Payment rate
<p><b>1. RESEEDING OF RANGE LAND</b></p> <p>(a) <b>Natural reseeding by deferred grazing.</b>—For withholding 25 percent of the range land in the ranching unit from grazing for the normal period from the start of forage growth to seed maturity, which period for the purpose of this practice shall be considered to be 5 months (150 days) beginning on a date between Feb. 1, and June 1, recommended by the county committee and approved by the State committee and the Regional Director: <i>Provided</i>, That,</p> <p>(1) If grazing is deferred on less than 25 percent of the range land in the ranching unit, a proportionate payment will be made;</p> <p>(2) On ranching units in which cattle or horses are grazed the area to be kept free of grazing is fenced and the fence is maintained sufficiently to prevent the entry of livestock;</p> <p>(3) On ranching units used exclusively for grazing sheep, the area to be kept free of grazing either by an adequate fence or by herding;</p> <p>(4) No payment will be made for deferred grazing on land that is normally not used for grazing during period for which payment is claimed;</p>	<p>40 percent of the range-building allowance which is computed for that ranch.</p>



Practices and conditions of payment	Payment rate
<b>1. RESEEDING OF RANGE LAND—Continued</b>	
(5) If the remaining range land in such ranching unit is overgrazed to such an extent as will decrease the stand of grass or injure the forage, tree growth, or watershed, no payment will be made;	
(6) The ranch operator must submit to the county committee in writing the designation of the deferred grazing acreage previous to the initiation of such practice.	
<b>Additional requirements by county committee.—</b>	An additional 20 percent of the range-building allowance will be paid if the ranch operator complies with all of the additional conditions or specifications established by the county committee.
In counties where the county committee, prior to the date set for the beginning of the deferred grazing period, has recommended additional requirements for that part of the ranch designated for reseeding by deferred grazing, such as the eradication of prairie dogs, mowing of weeds, and the eradication of loco or any other poisonous or range-destroying plants, and such requirements are complied with, the payment for this practice will be increased by the amount shown.	
(b) <b>Artificial reseeding.</b> —For reseeding depleted range land with good seed of adapted varieties of range grasses, legumes, or forage shrubs, provided such range land is properly prepared previous to such seeding by using such methods, including mowing, contour listing, or other methods as are approved by the county committee as being good practice for such land.	20 cents per pound of seed sown, but not in excess of \$2 per acre.
Satisfactory evidence must be submitted to the county committee regarding performance under this practice.	
(c) <b>Artificial sodding.</b> —For resodding depleted range land with adapted varieties of range grasses.	\$3 per acre.
<b>2. EROSION AND RUN-OFF CONTROL</b>	
(d) <b>For contour listing, furrowing, or subsoiling (chiseling).</b> —Furrow channels, if listed or plowed, shall be not less than 8 inches in width and 4 inches in depth; if subsoiled (chiseled), shall not be less than 3 inches in width and 6 inches in depth. If furrows are 7 feet or less apart, the actual acreage of land furrowed will be computed. If furrows are over 7 feet apart, the acreage of the practice will be computed on the basis of the acreage occupied by such furrows, each furrow being considered to occupy a strip 7 feet in width.	50 cents per acre.
(e) <b>For ridging range land on the contour.</b> —Such ridges or narrow terraces must be at least 3 feet in width from low point in the upper channel to the top of the ridge and at least 12 inches in height above such low point in the upper channel and spaced in accordance with the degree of slope as specified by the State committee.	10 cents per 100 linear feet.
(f) <b>Spreader dams and terraces.</b> —	15 cents per cubic yard for material moved in building the dams.
(1) For constructing spreader dams-----	

Practices and conditions of payment	Payment rate
<b>2. EROSION AND RUN-OFF CONTROL—Con.</b>	
(2) For constructing spreader terraces-----	40 cents per 100 linear feet of terraces constructed.
<p>Spreader dams and spreader terraces may be constructed alone or in combination with each other for the diversion of surface water to prevent soil washing of range land. Such dams and terraces must be accurately laid off and checked with a standard farm level or surveyor's instrument, and must be constructed in accordance with specifications.</p>	
<b>3. DEVELOPMENT OF STOCK WATER ON RANGE LAND</b>	
(g) <b>Earthen tanks or reservoirs.</b> —For constructing reservoirs or earthen tanks with spillways adequate to prevent dams from washing out, for the purpose of providing water for range livestock, provided that such dams shall be constructed in accordance with specifications issued by the State committee. Prior to construction the site for such dam must be inspected and a preliminary survey made by a representative designated by the county committee.	15 cents per cubic yard of material moved not in excess of 5,000 cubic yards, and 10 cents per cubic yard of material moved in excess of 5,000 cubic yards for each tank or reservoir.
<p>After a dam site is definitely decided on, it is required that a profile be made and platted and benchmarks and reference points be established.</p>	
(h) <b>Concrete or rubble-masonry dams.</b> —For constructing concrete or rubble-masonry dams in rough or broken areas (where earthen dams or reservoirs are impracticable and where there is no possibility of using the water stored by such masonry dam for irrigation), for the purpose of erosion control and providing water for range livestock, provided that such dams shall be constructed in accordance with specifications.	\$6 per cubic yard of concrete or rubble masonry.
<p>After a dam site is definitely decided on, it is required that a profile be made and platted and benchmarks and reference points be established.</p>	
(i) <b>Wells.</b> —For drilling or digging wells for the purpose of better distribution of watering places for livestock on range land, thus preventing erosion caused by trampling out of grass by livestock going long distances to water, and by overcrowding at one place. Such wells must be sufficiently cased to prevent caving. The ranchman is required to erect at his expense a windmill or power pump, together with adequate pumping equipment and water tanks. Payment will not be made for a well developed at or near ranch headquarters. A dry hole will not qualify for payment.	
(1) Wells with casing not less than 4 inches in diameter.	\$2 per linear foot.
(2) Wells with casing less than 4 inches but not less than 2 inches in diameter. An artesian well will qualify for payment at this rate if suitable stockwater is made available during the grazing season and adequate watering places are provided.	\$1 per linear foot.



Practices and conditions of payment	Payment rate
<b>3. DEVELOPMENT OF STOCK WATER ON RANGE LAND—Continued.</b>	
<b>(j) Development of natural watering places.</b> —For developing springs or seeps by excavating, walling up such springs or seeps with concrete or masonry, protecting the source from trampling by adequate fencing, and conveying the water through a trough or a pipe not less than 1 inch in diameter to a tank, for the purpose of providing water for range livestock:	
(1) Where excavation is in soil or gravel__	30 cents per cubic foot.
(2) Where excavation is in rock_____	50 cents per cubic foot.
The minimum payment for the development of one spring or seep shall be \$20 and the maximum shall be \$100.	
<b>4. PLANTING AND MAINTAINING A STAND OF TREES</b>	
<b>(k) Tree planting.</b> —For planting trees on range land, <i>provided</i> :	\$7.50 per acre.
(1) The trees are planted in 1939 prior to Nov. 1;	
(2) The number, kind, variety, and age of trees planted and methods of planting and growing are in accordance with approved specifications issued by the State committee; and	
(3) The acreage planted to trees is fenced and the fence is maintained sufficiently to prevent the entry of livestock.	
<b>5. CONSERVATION OF RANGE LANDS THROUGH THE ELIMINATION OF DESTRUCTIVE PLANTS</b>	
<b>(l) For eliminating prickly pear and cactus, as determined by the percentage of ground infested.</b> —	
(1) Light infestation, 2 percent to 6 percent, inclusive.	50 cents per acre.
(2) Medium infestation, 7 percent to 12 percent, inclusive.	75 cents per acre.
(3) Heavy infestation, above 12 percent.	\$1 per acre.
Where infestation is less than 2 percent, coverage will be calculated by counting 2 or more acres as 1, according to the relative facts found by the range inspector and approved by the county committee.	
<b>(m) For eliminating mesquite, as determined by the percentage of ground infested.</b> —	
(1) Light infestation, 5 percent to 20 percent, inclusive.	50 cents per acre.
(2) Medium infestation, 21 percent to 40 percent, inclusive.	\$1 per acre.
(3) Heavy infestation, above 40 percent.	\$2 per acre.
Where infestation is less than 5 percent, coverage will be calculated by counting 2 or more acres as 1, according to the relative facts found by the range inspector and approved by the county committee.	
<b>(n) For eliminating cedar, as determined by the percentage of ground infested.</b> —	
(1) Light infestation, 5 percent to 15 percent, inclusive.	75 cents per acre.

Practices and conditions of payment	Payment rate
<b>5. CONSERVATION OF RANGE LANDS, ETC.—Continued</b>	
(2) Medium infestation, 15 percent to 30 percent, inclusive.	\$1 per acre.
(3) Heavy infestation, above 30 percent.—Where infestation is less than 5 percent, coverage will be calculated by counting 2 or more acres as 1, according to the relative facts found by the range inspector and approved by the county committee.	\$1.50 per acre.
(o) <b>For eliminating lechuguilla, as determined by the percentage of ground infested.</b> —Heavy infestation, above 2 percent. Where infestation is less than 2 percent, coverage will be calculated by counting 2 or more acres as 1, according to the relative facts found by the range inspector and approved by the county committee.	50 cents per acre.
<p>NOTE.—The degree of infestation of destructive plants as outlined in practices Nos. 10, 11, 12, and 13 will be determined by judging the density of the growths and grading them in accordance with the percentage of the ground covered by the total spread of trees or plants, as estimated by the range inspector. In order to make an accurate estimate as to the percentage of coverage of such plants, the range inspector should step off a representative tenth or twentieth of an acre of infested area and measure the ground covered by all the trees and plants under consideration that are on the area. From this he can determine the percentage of coverage on such plot or plots, then use this percentage as a basis for arriving at the percentage of the entire infested area.</p>	
<b>6. FIRE GUARDS</b>	
(p) For the establishment and maintenance of fire guards not less than 10 feet in width by destroying vegetative cover by plowing furrows (with proper arrangements to be made to prevent erosion and gullyng) or by other mechanical means exposing the soil. (Payment will not be made if the fire guard is used in connection with controlled burning within the ranching unit.)	5 cents per 100 linear feet.

#### GENERAL CONDITIONS FOR PAYMENT

Application for range-building payments may be made only by a ranch operator, who is the person operating a ranching unit as owner, cash tenant, or share tenant, or a person who acts in a similar capacity in the operation of a ranch. In case there are two or more ranch operators, the application must be signed by all of them. However, if one or more refuse to sign, the county committee will determine the percentage shares of those operators who have signed the application. An owner or lessee who will operate the ranch for a portion of the year must apply for inspection before the closing date for accepting applications, in order to qualify under the program by performance after he actually assumes operation.



No deductions will be made from payments earned under the Range Conservation Program because of failure to meet soil-depleting acreage requirements and other conditions of the Agricultural Conservation Program. The right to payment, however, will be withheld from any ranch operator who fails to file within the prescribed time any form or furnish any information required concerning any ranch in which he is interested.

No payment will be made for practices for which one-half or more of the labor, seed, trees, or materials are furnished by any State or Federal agency other than the Agricultural Adjustment Administration. If less than one-half of the labor, seed, trees, or other materials used in carrying out any practice is furnished by a State or Federal agency, other than the Agricultural Adjustment Administration, payment will be made at one-half of the full rate.



FIGURE 4.—Natural reseeding of grass is aided by contour furrowing.

Wherever it is found practicable, trees, seeds, and other material may, upon request of the ranch operators, be furnished by the Agricultural Adjustment Administration to apply as all or part of the ranch payment.

All or any part of any payment under this program may be withheld from any ranch operator (1) who has adopted any practice that tends to defeat the purposes of the 1939 or previous Range Conservation Programs or to offset practices for which payment is sought; (2) who adopts any practice on forest or woodland controlled by him which is contrary to sound conservation practices; (3) where adequate inspection of his ranch shows the stand of grass has been decreased or the forage, tree growth, or the watershed has been injured by overgrazing in 1939, consideration being given to rainfall, rate of stocking, and other local conditions; (4) or to any person changing for 1939 any leasing arrangements so as to divert to himself payments which would

have been made to the lessee under the 1938 conditions of the lease, or employing any other scheme or device which would have the effect of depriving any other person of any payment or share of payment to which such other person otherwise would be entitled.

Under the marketing-quota provisions of the Agricultural Adjustment Act of 1938, no payment will be made for participation in the 1939 Range Conservation Program to any person who knowingly overplants in 1939 the cotton allotment for any farm in which he has an interest.

#### **PAYMENTS LIMITED TO \$10,000**

Conservation payments to a person will be limited to \$10,000 in a State except that a corporation, association, or like organization may not receive more than \$10,000 in the United States.

#### **ASSIGNMENTS**

A person may assign his interest in any payment due him under the 1939 Range Conservation Program as security for loan or advance made for financing the making of a crop in 1939 or the carrying out of range-building practices in 1939. Assignments must be made in writing on a prescribed form and filed in the county agent's office.

#### **APPEALS**

Any ranch operator who considers himself aggrieved by any recommendation or determination of the county committee may, within 15 days after notice thereof is given, request the county committee in writing to reconsider the recommendation or determination.

Appeals may also be taken from the decisions of the county committee to the State committee and to the Director of the Southern Division.











